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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,557	09/22/2003	Gregory L. Kowalski	81548/LPK	9983

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EXAMINER	
GLEITZ, RYAN M	

ART UNIT	PAPER NUMBER
2852	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,557	KOWALSKI, GREGORY L.	
	Examiner	Art Unit	
	Ryan Gleitz	2852	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6,7 and 9-19* is/are rejected.

7)☒ Claim(s) *3-5 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because "A release agent fluid management system and methods of dispensing such fluid in fuser apparatus of image reproduction systems" is not a sentence. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6, 9-13, and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Mills et al. (US 5,708,914).

Mills et al. disclose a release agent fluid management system for a fuser apparatus (20) of an image reproduction apparatus operating according to predetermined operating parameters, the fuser apparatus (20) having a heated surface, provided by heat and pressure applied in the nip of opposing fuser and pressure members such as roller or belt members (col. 1, lines 26-28), that travels in a first direction and contacts a toner image on a substrate (S) for fixing the toner to the substrate (S).

A drop-on-demand generator (32) is a spray device, disposed transverse to the direction of travel of the fuser heated surface (21), selectively operable to dispense release agent fluid to

selected regions on the heated surface of the fuser to prevent toner particles from adhering to the heated surface.

The drop generator actuating signals can be scheduled to shift register 52 to effect the desired drop pattern in proper preceding timed relations to the respective portions of a copy sheet with which they are intended to interface (col. 5, lines 9-13), which reads on a controller coupled to the spray device (32) for controlling the operation thereof to adjust amounts of release agent fluid dispensed as a function of signals indicative of one or more image reproduction operating parameters.

Regarding claims 6, 10 and 11, the drop generators of array 31 are selectively operated to direct line by line drop patterns of offset inhibiting oil onto the respective linear sections of the surface of fuser roller 21 that sequentially pass application region R on their way to contact with the toner image on sheet S at the fusing nip (col. 4, lines 63-66). This reads on a roller (21) has a plurality of positions definable by angular position about the axis and measurement in an axial direction along the surface and controllably releasing fluid among those positions synchronized with the movement of the substrate relating to the roller surface.

Regarding claim 9, operating parameters include data taken from nature of the copy sheet (col. 4, lines 39-40), which reads on substrate type.

Regarding claim 12, the processor system varies the amount of release agent fluid applied to portions of roller surface as a function of its solid area content, its half-tone content, its continuous tone content, its line content and its different color toners contents (col. 4, lines 50-52), which reads on the amount of toner in an image reproduction coming into contact with each such roller surface portion.

Regarding claims 16-19, the release agent fluid management system above also reads on a method for controlling the application of release agent fluid.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. (US 5,708,914) in view of Consaul et al. (US 4,085,702).

Mills et al. disclose the release agent fluid management system above, but do not disclose an atomization air source.

However, Consaul et al. disclose an atomization air source (28) to propel release agent to a fusing roller.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the spray devices of Mills et al. to use the atomization air source taught by Consaul et al.. The suggestion for doing so would have been that an atomization air source is a simpler and less expensive method of propelling the release agent to the fuser roller than the piezoelectric method taught by Mills et al.. Additionally, Mills et al. cite the Consaul et al. patent, noting that it offers significant advantages with respect to contamination problems (col. 1, lines 64-66).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. (US 5,708,914) in view of Mikita (JP 2001-265151).

Mills et al. disclose the release agent fluid management system above, but do not disclose an additional roller that is positioned to apply release agent fluid directly to a heated fuser member of the fuser apparatus.

However, Mikita disclose a release agent fluid management system including an application roller (48g) between the spray device (63a) and the fusing roller (48).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the release agent fluid management system of Mills et al. with the application roller taught by Mikita so that the fluid agent supplying device can work proper regardless of the inclined state of the machine (abstract, lines 2-3).

Allowable Subject Matter

Claims 3-5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sugiyama (JP 60-235176) discloses a spray port which atomizes air and blows oil onto a heat roll.

Okubo et al. (JP 54-097046) disclose atomizing a parting liquid into mists so that a small required quantity of partying liquid may be stably and uniformly applied to the fixing roller.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Gleitz whose telephone number is (571) 272-2134. The examiner can normally be reached on Monday-Friday between 9:00AM and 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

rg

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